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NORTHERN ELLESMERE ISLAND: A STUDY IN THE HISTORY OF GEOGRAPHICAL DISCOVERY

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IN 1616, a tiny cockleshell craft, the "Discovery," sailed north into Baffin Bay and reached the astonishingly high latitude of 77° 22′ N. Before returning, Bylot and Baffin discovered the gateway to the North Pole, "Sir Thomas Smiths Sound," and the entrance to the North-West Passage, "Sir James Lankasters Sound."[1]

From Smith Sound a series of straits and basins—Kane Basin, Kennedy Channel, Hall Basin, and Robeson Channel—lead to the "Polar Sea." In northern Baffin Bay and in Smith Sound large stretches of water appear never to freeze over completely; beyond this "North Water," Kennedy Channel also has patches of open water in it all year round. These apparently promising conditions for navigation to the north are offset by the way in which ice packs and blocks the narrow straits. All through the arctic summer, the polar pack in the Lincoln Sea discharges ice into Kane Basin. The ice floes, together with bergs from the Humboldt and other Greenland glaciers, and the ice formed in the winter, drift southward during the summer. Heavy tidal currents and winds from the south and southwest complicate the pattern of ice movement. The result is a shifting, drifting mass of ice whose thickness and distribution can vary from day to day, and even from hour to hour. This way to the North Pole is less an open door than one that opens and closes rapidly. The pack ice, moving with wind and tide, has caught, held, and sometimes crushed and sunk ships that have ventured into these waters. And yet, with a strong ship, well-powered, and a skilled ice pilot, it is possible to sail further north in this area than anywhere else in the world. Before 1957, no less than nine ships had penetrated north beyond Smith Sound, and as early as 1875 one ship had sailed right to the Arctic Ocean.

Before the days of powerful icebreakers, a journey to the north by this route meant an absence of at least a year and perhaps of two or three years, depending on ice conditions. Wooden ships, even with strengthened bows, were dependent on the whims of winds and tides to open leads, or to clear the seas of ice. The chances of losing or damaging a ship were strong; even icebreakers of the "Wind" class have lost screws and strained plates in these channels. For this reason, few parties ventured north this way, and, since this was a sea route, those that did were fully occupied in coping with ice conditions and so had little time for travel on land.

The men who sailed or sledged up the seas between Greenland and Ellesmere Island were usually intent upon one thing—reaching the North Pole, or a new "Furthest North." Even before the disappearance of Franklin, the search for the North-West Passage had channelled all arctic exploration westward along Lancaster Sound. The search for Franklin took ships and sledges all over the scatter of islands southwest of Ellesmere Island, but this island was not itself visited. The way north through Smith Sound was sealed off by a barrier that existed only in men's minds. John Ross, in 1818, rediscovered Baffin Bay and also sighted Smith Sound.[2] But his observation—that there was no way northward through the sound—seemed to confirm all existing beliefs.

In 1849, a whaling captain named Gravill landed on the southeast coast of Ellesmere Island—the first actual record of a landing on Canada's third largest island.[3] Three years later, Commander Inglefield sailed north into Smith Sound while searching for Franklin.[4]

Dr. Elisha Kent Kane, in 1853, was the first American to penetrate north by this route.[5] In addition to seeking Franklin,

Pam (*41): 91(091)
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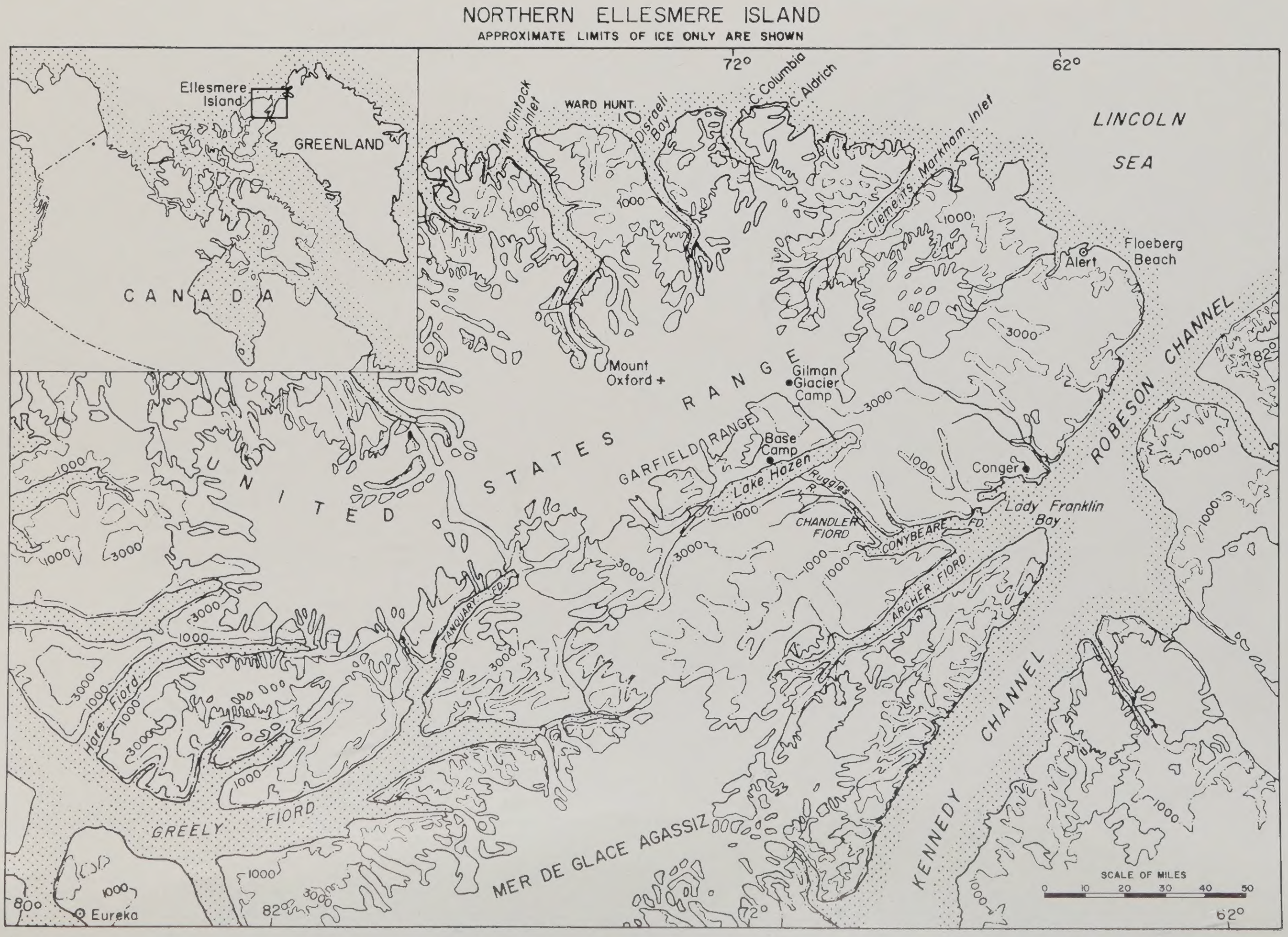
NORTHERN ELLESMERE ISLAND
APPROXIMATE LIMITS OF ICE ONLY ARE SHOWN
Ellesmere Island
GREENLAND
CANADA
72°
62°
M'Clintock Inlet
WARD HUNT I.
Disraeli Bay
C. Columbia
C. Aldrich
Clements Markham Inlet
LINCOLN SEA
Floeberg Beach
Alert
Mount Oxford
Gilman Glacier Camp
Base Camp
UNITED STATES RANGE
GARFIELD RANGE
Lake Hazen
Ruggles R.
CHANDLER FIORD
CONYBEARE FD.
Conger
Lady Franklin Bay
ROBESON CHANNEL
KENNEDY CHANNEL
ARCHER FIORD
TANQUARY FD.
Hare Fiord
GREELY FIORD
MER DE GLACE AGASSIZ
Eureka
80°
82°
72°
62°
82°
1000
3000
SCALE OF MILES
0 10 20 30 40 50

FIGURE 1

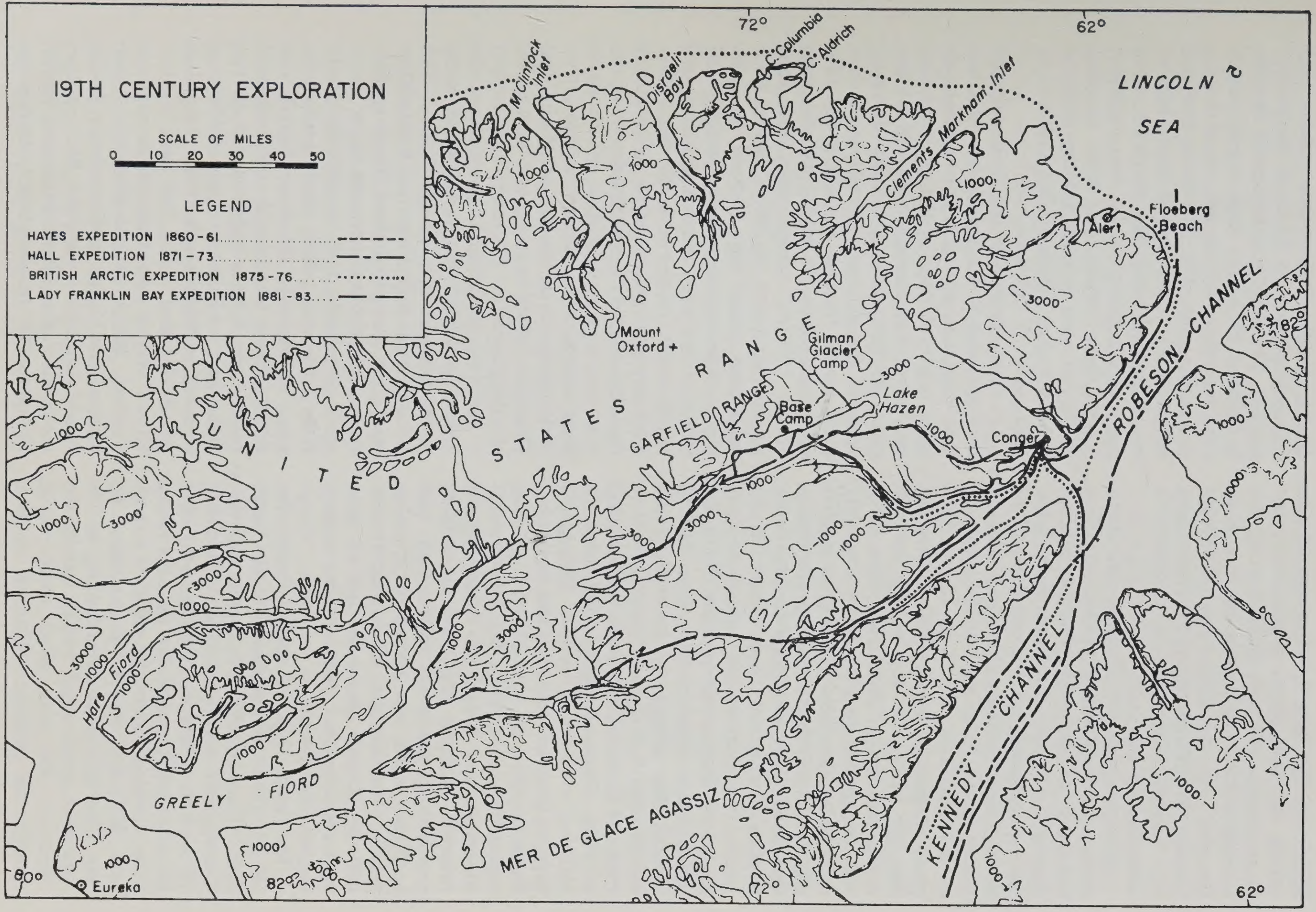
19TH CENTURY EXPLORATION
SCALE OF MILES
0 10 20 30 40 50
LEGEND
HAYES EXPEDITION 1860-61
HALL EXPEDITION 1871-73
BRITISH ARCTIC EXPEDITION 1875-76
LADY FRANKLIN BAY EXPEDITION 1881-83
72°
62°
M'Clintock Inlet
Disraeli Bay
C. Columbia
C. Aldrich
Clements Markham Inlet
LINCOLN SEA
Floeberg Beach
Alert
ROBESON CHANNEL
KENNEDY CHANNEL
Conger
Lake Hazen
Gilman Glacier Camp
Base Camp
GARFIELD RANGE
UNITED STATES RANGE
Mount Oxford
Hare Fiord
GREELY FIORD
MER DE GLACE AGASSIZ
Eureka
80°
82°
1000
3000

FIGURE 2

Kane was also bent on a voyage of discovery and exploration. Most of the work of his parties was concentrated along the Greenland coast; Kane and his men were the first to see the huge Humboldt Glacier. In 1854, one man, Morton, got into Kennedy Channel and saw northern Ellesmere Island.

After the fate of Franklin had been determined by Rae and M'Clintock, there remained one outstanding lure for exploration in the Arctic—the North Pole. Kane had propounded an "Open Polar Sea" theory that envisaged the possibility of sailing to the Pole.[6] One of the members of his expedition, Dr. I. I. Hayes, proposed to do just that in 1860. Hayes had the right route, but the wrong idea. He named his book "The Open Polar Sea," and, though his theories sound hopelessly naive today, they fitted in well in an age that placed more faith in a divine providence that made all wonders possible than in the dictates of an inconvenient science.[7] If the North Water could stay open all year round, all things were possible! With the usual irony, Hayes's ship, the "United States," was stopped by ice well to the south in Smith Sound and the party had to winter at Etah in Greenland. In the spring of 1861, Hayes sledged north, intent on reaching northern Ellesmere Island. He kept to the west side of Kane Basin and Kennedy Channel, and claimed to have reached Lady Franklin Bay. Instruments for determining latitude and longitude were primitive in those days, and the striking similarity of the many capes, bays, and headlands under the spring snow makes positive identification of any landmarks difficult. Hayes's claims are looked upon with suspicion, but they have never been entirely discounted.

The next ship in these waters, the "Polaris," also set out to sail to the North Pole.[8] The year 1871 was a good ice year. Captain Hall's ship actually reached 80° 11′ N and sighted the Lincoln Sea; Hall reported land beyond this sea. Returning from a sledge trip to the coast of Greenland, Hall died of a stroke on board his ship. The difficulties of navigating in this area were emphasized by the fate of the "Polaris." She had sailed north easily enough, but getting south was another matter. Frozen in for one winter, she drifted southward in the ice in the following fall. The ship was nipped in the ice in October 1872, and men, stores, and a boat were put over the side on to the ice in case she sank. The ship broke free and drifted away. Later the "Polaris" had to be abandoned, and the survivors were rescued. The party on the floe, including a baby born during the drift, travelled south and were rescued off the coast of Labrador after a drift by floe and boat of 1,500 miles in 196 days.

Of three expeditions that had ventured north beyond Smith Sound, two had lost their ships, and all had suffered great hardships. The sufferings of the explorers and their reports of constantly moving sea ice, great glaciers, and bare cliffs dropping sheer to the sea were already giving this route to the North a reputation for difficulty and danger. In Hall Land, the men of the "Polaris" sledge party had seen another aspect of the High Arctic. Here musk-oxen grazed on a lush tundra vegetation. Permanent cold was a strongly entrenched idea when the thoughts of people in the south turned towards the Arctic. That any part of the north above 80° N could be relatively warm at any time of the year, and support vegetation and an abundant animal life, was unthinkable. The dark plates in the books of Hayes and Kane also helped to emphasize the sombre, brooding aspect of the land in this region.

In 1875, two British Navy ships, the "Alert" and the "Discovery," sailed north under Captain Sir George Nares.[9] The British Arctic Expedition cost $750,000 to equip, and was provisioned for two years. Its leader had been instructed to get as far north as possible, and to reach the North Pole if he could. Both ships reached the coast of northern Ellesmere Island, and wintered there instead of on the Greenland coast, as the American ships had done. The "Discovery," a Dundee whaler of 378 tons, wintered at Discovery Harbour. The more powerful "Alert," of 1,350 tons, reached 82° 25′ N and passed the winter night at Floeberg Beach, overlooking the Arctic Ocean. The sledge parties of the British Arctic Expedition were the first to chart the coasts of northern Ellesmere Island; the diaries of the sledge-party leaders reflect a sailor's view of the land, a land into which they did not venture far. Almost as soon as the "Discovery" reached its winter quarters, a party of sailors had gone ashore to hunt, and these men were the first to set foot in northern Ellesmere Island. In the spring of 1876, Aldrich set out on his monumental journey to the west. Hauling heavy oak sledges in temperatures down to —40° F, his party rounded Cape Aldrich, the farthest north point in Canada at 83° 07′ N, and travelled as far as Alert Point, on Yelverton Bay. Two hundred and twenty miles of new coastline were added to the map, and Aldrich was the first person to note "ice rollers," and "several low ridges from 30 to 40 feet high, and varying from a few hundred yards to about a mile or so in length" along the north coast of Ellesmere Island. He had discovered the ice shelves of northern Ellesmere Island, the source region of the floating ice islands.

In July 1876, Nares, with half his men sick with scurvy, sailed south. Both ships succeeded in clearing the ice and reached England in October.

The north and east coast of northern Ellesmere Island had been charted. But the interior of the island still remained a vast blank on the map.

Some of this blank on the map was filled in by the efforts of the next expedition to Ellesmere Island, the Lady Franklin Expedition.[10] In 1879, the Austrian explorer Weyprecht had proposed that a series of stations be established in the Arctic, where simultaneous scientific observations could be taken. Eleven nations, including the U.S.A., agreed to co-operate in the establishment of fourteen stations. The United States Senate authorized the expenditure of the trifling sum of $25,000 to cover the cost of a station at Lady Franklin Bay. Lieutenant Greely, Fifth Cavalry, was to command this outpost, the most northerly of all the bases established during the first International Polar Year.

After only two and a half months of preparation, Greely and his men sailed from St. John's, Newfoundland, on July 7, 1881, and reached Lady Franklin Bay on August 11. Only the immediate vicinity of Fort Conger, the station they built there, was explored in the fall of 1881. Spring explorations included a sledge trip to the "Alert" winter quarters and on to the sea ice by Dr. Pavy, the surgeon, and the new attainment of a new farthest north by Lieutenant Lockwood, Sergeant Brainard, and the Eskimo Christiansen at 83° 24′ N on the Greenland coast.

In April 1882, Greely and a small party set off and made their way into Conybeare Bay. Almost at the head of this bay, a way inland stretched before them to the northwest. Greely's party pushed up Chandler Fiord, burning with impatience. In the distance they could now see snow-covered "hog back" mountains rising above interior ice fields.

At the head of Chandler Fiord, the party climbed an ice dam where the Ruggles River entered the fiord. At the head of the winding river, Greely came across something that made him rub his eyes and look again. In temperatures well below zero, the river was open and flowing for fifty feet. A sharp turn brought the party an even greater surprise. Before them lay an immense ice-covered lake, backed by a range of high mountains through which glaciers descended from an icecap beyond. On May 2, they crossed to the other side of the lake, and examined the Henrietta Nasmith Glacier. They then returned to Fort Conger.

In late June, Greely set off on a summer journey. This time the party went inland by way of Black Rock Vale, east of the Ruggles River. On June 24, on the shores of Lake Hazen, Greely noted a temperature of 74° F in the shade. Greely and one other man reached Mount Arthur, their farthest point inland near the divide west of the lake, and from there saw spread before them several thousand square miles of unknown, unexplored country—the interior of northern Ellesmere Island. Southwest of Lake Hazen rose the Conger Mountains, and to the north of these Greely saw "a confused mass of hog back mountains, all entirely snow covered." Greely's exploration of the Lake Hazen area was one of the most outstanding feats of polar travel, and one of the few extensive inland journeys ever undertaken in the High Arctic. Not for another seventy-five years was the land to be so thoroughly explored and studied.

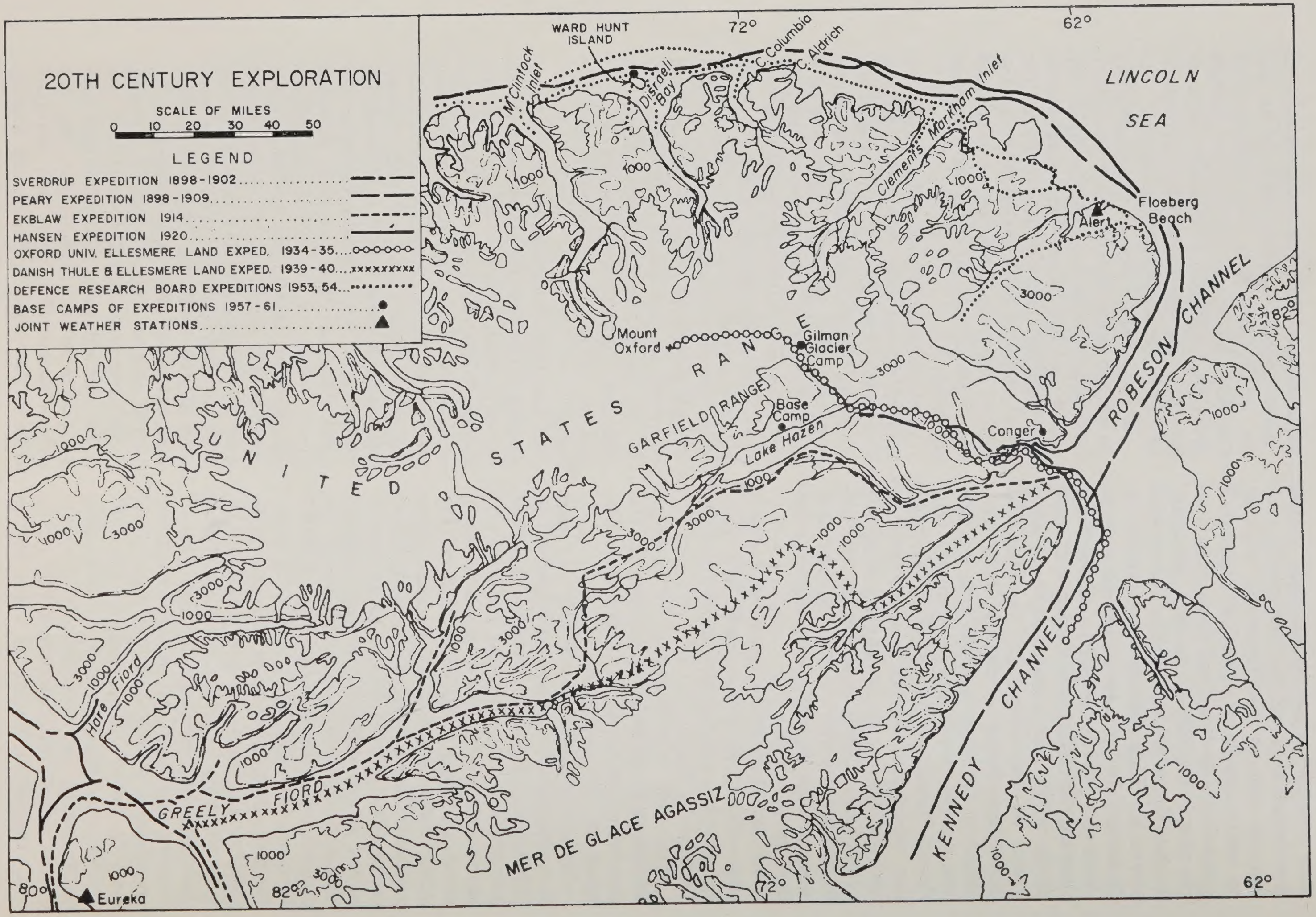
20TH CENTURY EXPLORATION
SCALE OF MILES
0 10 20 30 40 50
LEGEND
SVERDRUP EXPEDITION 1898-1902
PEARY EXPEDITION 1898-1909
EKBLAW EXPEDITION 1914
HANSEN EXPEDITION 1920
OXFORD UNIV. ELLESMERE LAND EXPED. 1934-35
DANISH THULE & ELLESMERE LAND EXPED. 1939-40
DEFENCE RESEARCH BOARD EXPEDITIONS 1953, 54
BASE CAMPS OF EXPEDITIONS 1957-61
JOINT WEATHER STATIONS
WARD HUNT ISLAND
72°
62°
M'Clintock Inlet
Disraeli Bay
C. Columbia
C. Aldrich
Clements Markham Inlet
LINCOLN SEA
Floeberg Beach
Alert
ROBESON CHANNEL
KENNEDY CHANNEL
Conger
Mount Oxford
Gilman Glacier Camp
Base Camp
Lake Hazen
GARFIELD RANGE
UNITED STATES RANGE
Hare Fiord
GREELY FIORD
MER DE GLACE AGASSIZ
Eureka
80°
82°
1000
3000

FIGURE 3

Greely reached Fort Conger on July 10, and the wait for the relief steamer began. No ship appeared that fall, and the party spent another winter in northern Ellesmere Island. Lockwood, again sledging with Brainard and Christiansen, journeyed west in May 1883. This party discovered the Mer de Glace Agassiz, with its sheer, unclimbable, 200-foot-high face called by Lockwood "The Chinese Wall." Detouring around this, the three men reached the head of Greely Fiord. Here they turned back, after becoming the first people to visit the west coast of northern Ellesmere Island.

Greely had been ordered to abandon Fort Conger if no relief ship reached him by September 1, 1883. By boat, and on foot over the floes, the party travelled to Cape Sabine, at the western entrance to Smith Sound. No ship came to relieve them, and Greely and his men were forced to winter at "The Outpost of the Lost," where, one by one, they died. Of the first men ever to spend two winters in northern Ellesmere Island, only Greely and six others remained alive when help finally arrived on June 22, 1884.[11]

In the spring of 1902, Otto Sverdrup and Per Schei sledged up Nansen Sound, tried to penetrate Hare Fiord without success, and finally reached Land's Lokk.[12] Here, at 81° 40′ N, the two men turned west and returned to the "Fram." This journey took Sverdrup to the most northerly point in all the extensive travels of the expedition, and to this day the southwest coast of northern Ellesmere Island remains largely unknown.

In 1899, Peary reached Fort Conger, and in the next ten years the American explorer and his Eskimos frequently hunted in the Lake Hazen area. Ranging over the region, they decimated the herds of musk-oxen. Mute testimony to their depredations was the discovery, in 1958, of bleached bones and ejected rifle shells in the lowlands around the lake. On June 2, 1906, Peary and three Eskimos left the "Roosevelt" in the ice at Cape Sheridan and sledged west. Rounding Cape Columbia, they travelled down the coast of northern Ellesmere Island and passed Aldrich's farthest west at Alert Point. On June 28, the party reached the north tip of Axel Heiberg Island. Here Peary turned back, crossing the ice shelves at the height of the melt season. While Peary sledged along this coast, one of his assistants, Ross Marvin, travelled along the seaward side of the Ward Hunt Ice Shelf, making oceanographic observations. In 1909, Peary left Cape Columbia for his successful attempt on the North Pole. He collected at Crane City, his igloo camp, no less than six white men, one negro, nineteen Eskimos, and 130 dogs to aid him in his final assault on the Pole. Unfortunately, Peary's accounts of his explorations in northern Ellesmere Island are sketchy in the extreme and contain little useful detail;[13,14] his interest in the Lake Hazen area appeared to be culinary rather than scientific.

Few explorers visited northern Ellesmere Island after Peary. In 1914, Ekblaw, geologist and botanist with D. B. Macmillan's "Crocker Land" expedition, travelled from Greely Fiord, down the Very River, along the shores of Lake Hazen and so down the Ruggles River to Lady Franklin Bay.[15] Commander Hansen, of the Royal Danish Navy, laid depots at Fort Conger and Cape Columbia in the spring of 1920, in connection with the drift of Amundsen's ship the "Maud."[16] In 1930, Krueger and his party visited Land's Lokk before turning southwest and being lost forever.[17]

In 1934, the Oxford University Ellesmere Land Expedition sailed north in the "Signalhorn," with the intention of establishing their base at Fort Conger.[18] The ship was stopped by ice, and the party wintered at Etah in Greenland. From here, in the spring of 1935, a party of four set out with the ambitious aim of crossing northern Ellesmere Island and reaching Cape Columbia by land. From Fort Conger, they travelled up Black Rock Vale to Lake Hazen. While two men fished through the ice of the lake for food to feed the dogs, two others, A. W. Moore and the Eskimo Nukapingwa, sledged up the Gilman River and on to the Gilman Glacier. They made a dash for the highest mountain they could see in the distance. From the summit of this mountain, Mount Oxford, they saw a vast white wilderness of snow, many peaks, and, on the horizon, another range of mountains. Naming the new range the "British Empire Range," they turned for home.

A brief visit by the Danish Thule–Ellesmere Island Expedition of 1939–41 to the Lake Hazen region marked the only penetration of the interior of the island between 1935 and 1951.[19]

In 1950, the joint weather station at Alert was established near Floeberg Beach, after a preliminary reconnaissance of the north coast of Ellesmere Island by American icebreakers. The station's location, at 82°30′N, provided a convenient base for field parties working in northeast Ellesmere Island. In 1951, the naturalist S. D. Macdonald, of the National Museum, and the entomologist P. Bruggemann, of the Department of Agriculture, carried out surveys around Alert and along the Wood River.[20] In 1952 P. Gadbois and C. Laverdière of the Geographical Branch made a geographical survey of the region around the weather station.[21] In the following year, G. Hattersley-Smith of the Defence Research Board and R. Blackadar of the Geological Survey travelled along the north coast of the island, and also journeyed up the Wood River.[22] In 1954, Hattersley-Smith led a joint Canadian-U.S. expedition to Ward Hunt Island.[23] From here glaciological and geological studies were carried out along the north coast, in the fiords, and on the ice shelves of northern Ellesmere Island. Although the party was flown into the area, Hattersley-Smith and Christie used a dog sledge for a trip to Land's Lokk, the first such journey since Peary passed this way in 1906.

Before "Operation Hazen" visited the area, this farthest north part of Canada was little known. The coast had been outlined, but the vast area beyond Lake Hazen had been visited only by Greely, and by Moore and Nukapingwa. Only Greely had seen this inland region in summer, and his reports of a warm, arctic paradise do not seem to have aroused much enthusiasm or response. Northern Ellesmere Island was a vast storehouse of wonders, an almost untouched outdoor laboratory where arctic processes could be studied, an area rich in archaeological remains, a native habitat where High Arctic plants and animals were preserved and protected. For these reasons, it was selected as one of the best places in arctic Canada for a full-scale expedition, the Canadian International Geophysical Year Expedition "Operation Hazen" organized by the Defence Research Board.[24]

This expedition was in the field from April 1957 to August 1958. Supported by aircraft of the R.C.A.F. and ships of the United States Navy and Coastguard, the operation had three phases. During the first, a party of six men made glaciological, geological, seismic, survey, and meteorological observations on the Gilman Glacier, while two men at base camp studied the lake and the geology of the area around Lake Hazen. In 1957–8, four men wintered over at the Lake Hazen base camp—the first ever to do so at a station in the interior of any of the Queen Elizabeth Islands. In addition to keeping a full weather record for the period, studies of soil temperature, vegetation, and wild life were also undertaken. In April 1958, seven scientists arrived at Lake Hazen to continue the work they had begun during the first phase of the expedition, together with three others—a geologist, a glaciologist, and a gravimetrist. This party extended and intensified the first summer's work, and later in the summer a geographer, a botanist, a mammologist, a marine biologist, and an archaeologist arrived to work out from the base camp. The emphasis throughout "Operation Hazen" was on scientific work, not on extensive travelling. While some notable journeys were made, such as the one from Lake Hazen to Alert and that from tide water at Clements Markham Inlet to tide water at Chandler Fiord, they were undertaken in the course of scientific studies. By the time the expedition concluded its work, a large part of the interior of northern Ellesmere Island had been explored and studied for the first time, and, although much work remained to be done, much had been learned of the glacial regimes, weather, rich flora and fauna, land forms, structure and geology of the area, and past history of this almost previously unknown land. Observations on weather and glacier movements were compared with those of the Greely expedition, and extremely valuable comparative studies helped to trace the long-term climatic trends in the area.

In 1959, 1960, and 1961 small expeditions sponsored by the Canadian Defence Research Board continued the work begun during "Operation Hazen." In addition to botanical and wild-life studies, gravimetric, geological, meteorological, and glaciological observations were made; soil studies in the Hazen area were begun in 1960. In 1961, two members of the expedition crossed the northern Ellesmere Island icecap from east to west—the first time this had ever been done.

The main areas on which the Canadian expeditions concentrated included the Lake Hazen basin and the lowlands at its eastern and western ends, as well as the region between the lake, including the Ruggles River, Chandler Fiord, Conybeare Bay, and the other outlets along the east coast of northern Ellesmere Island, the Gilman Glacier and the icefields around Mount Oxford, and the snout and the head of the Henrietta Nasmith Glacier. Reconnaissance trips took sledge parties into the interior of the icecap, and flights by light planes and by R.C.A.F. "Dakotas" covered wide areas during 1957 and 1958.

The approach to northern Ellesmere Island by the Canadian expeditions from 1957 to 1961 emphasizes the difficulty of access into the area. The field parties were flown in during the spring, the planes landing on the natural airstrip of ice-covered Lake Hazen, and usually evacuated in the fall by helicopters from icebreakers moored in Chandler Fiord, or by amphibious aircraft landing on Lake Hazen. In August 1957, an icebreaker made the trip from Thule in Greenland to the head of Chandler Fiord in forty hours, an indication of how open the sea passage between Greenland and Canada can become. Three routeways—Ruggles River, Black Rock Vale, and Wood River—offer relatively easy access into the heart of northern Ellesmere Island, especially in spring. Penetration into the icecap, however, is extremely difficult, and the Gilman River and Glacier offer at best a rout that can only be used by dog sledges and small mechanical vehicles. Descending from the icecap to the north coast of Ellesmere Island presents great hazards, even for dog sledges, and has only been done once.

The north coast of the island cannot, therefore, be easily reached, especially as it remains icebound all year. And yet this coast has a highly strategic location, lying as it does on the shores of the "Arctic Mediterranean." Added importance is given to this coast by the ice shelves attached to the land. These shelves have acted as natural airfields for medium and heavy aircraft. Their form, origin, and structure have been investigated by the expeditions of 1953 and 1954 led by Hattersley-Smith. In 1959 and 1960 two large joint United States–Canadian expeditions spent the summer months making a detailed study of the ice shelves and the coast of northern Ellesmere Island.[25] A base camp was established on Ward Hunt Island, and studies in both years concentrated on the Ward Hunt Ice Shelf. Meteorological, glacial-meteorological, survey, glaciological, geophysical, ice engineering, geological, and tidal observations were made with a view to determining the history and character of the shelf, its relation to its environment, both present and past, and to developing techniques that would improve its capacity to support traffic throughout the year.

Northern Ellesmere Island covers over 30,000 square miles in all, of which about 11,000 lie under permanent ice. The history of the discovery and exploration of this vast land indicates how a region that was forgotten and neglected for years can suddenly become of great scientific and strategic importance. In the past ten years, no less than seven small and three large scientific expeditions have worked in the area, and this remote part of Canada still offers much scope for exploration and study.[26]

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24. For a general account of the work of this Canadian expedition, see Canada, Defence Research Board: *Operation Hazen: Narrative and Preliminary Report for the 1957 Season* (Report D. Phys. R [G] Hazen, 2, Ottawa, 1958) and *Operation Hazen: Narrative and Preliminary Reports, 1957–58* (Report D. Phys. R [G] Hazen, 4, Ottawa, 1959). Also Lotz, J. R.: Operation Hazen (*Can. Geog. J.*, 13(2), pp. 40–51, and (3), pp. 100–111, August and September, 1961); and Hattersley-Smith, G.: Northern Ellesmere (*Beaver*, Winter 1961, pp. 42–47).
25. Lotz, J. R., and Sagar, R. B.: The Ellesmere Island ice shelf expeditions, 1959–60. *Arctic Circular* (in press).
26. A description of the exploration of the archipelago may be found in Taylor, Andrew: *Geographical discovery and*

exploration in the Queen Elizabeth Islands. Geographical Branch Memoir no. 3, Ottawa, 1955.

RÉSUMÉ

Le secteur nord de l'île d'Ellesmere, situé à moins de 500 milles du pôle, est la partie la plus septentrionale du Canada. Bien que Bylot et Baffin eussent découvert une route vers le Nord, la recherche du « Passage vers le Nord-Ouest », puis celle de la Terre de Franklin, orientèrent les explorations vers l'Ouest jusqu'au milieu du siècle dernier. A cette époque, la première d'une série d'expéditions tenta de découvrir « la route américaine vers le pôle » entre la côte occidentale du Groënland et l'île d'Ellesmere. Toutes ces expéditions rencontrèrent des obstacles sérieux, étant donné que les conditions de passage à travers les glaces sont très variables dans cette partie de l'Arctique. Plusieurs explorateurs, notamment Nall et Nares, atteignirent néanmoins des points très avancés vers le Nord.

La première exploration d'envergure de l'intérieur de la partie septentrionale de l'île d'Ellesmere fut entreprise par les membres de l'expédition infortunée de la baie de Lady Franklin. La côte nord de l'île d'Ellesmere servit de base d'opérations à Peary, qui entreprit de là sa marche réussie vers le pôle. Par la suite, le territoire ne fut que peu visité et les explorations qu'on y entreprit ne furent que de rapides courses à l'intérieur des terres.

Le Haut-Arctique a récemment suscité une curiosité scientifique croissante; la position stratégique de l'île d'Ellesmere, dans cette « Méditerranée Arctique » qui sépare l'Amérique du Nord de l'U.R.S.S., explique également l'intérêt de plus en plus marqué qu'on y porte. Depuis 1950, sept petites et trois grandes expéditions scientifiques y ont poursuivi des travaux de recherche. L'une de ces expéditions, connue sous le nom de « Opération Hazen », fit partie de la contribution canadienne aux travaux de l'Année Géophysique Internationale de 1957–58.

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